

sequences are possible as well. The respective steps with outlier correction and transmission time offset estimation can for example be performed in parallel. Furthermore, the quality criteria in step S3 and S5 (and S4-2, S4-2') as well as in the S6 procedure may be equal ( $V_{thr1} = V_{thr2}$ ) or different ( $V_{thr1} \neq V_{thr2}$ ), fixed or varying. In the example with loss functions, it will generally be appropriate to use different quality criteria at least for calculations associated with different degrees of freedom.

*Please amend the paragraph beginning at page 30, line 17, and continuing to page 30, line 32, as follows:*

Fig. 5 is a schematic block diagram illustrating an exemplary hardware implementation of a mobile terminal in accordance with the technology described herein~~present invention~~. The mobile terminal 500 ~~consists of a~~comprises a GPS RF front end 510, a positioning module/processor 520, a cellular communication module 530 (with a cellular RF module 532 and a cellular baseband processor 534), as well as antennas 512, 536 for communication with the cellular network and the GPS system, respectively. The cellular communication module 530 receives assistance data from the cellular network. The assistance data could ~~consist of~~comprise ephemeris and clock corrections for visible satellites, an approximate UE location and an approximate GPS system time. Alternatively, the assistance data could contain explicit assistance intended only for assisting the correlation processing. The assistance data is in both cases sent to the positioning module 520. The communication module 530 also provides the GPS RF front end 510 and the positioning module 520 with a clock reference. The RF front end module 510 is controlled by the positioning module 520.

*Please amend the paragraph beginning at page 32, line 17, and continuing to page 32, line 17, as follows:*

The predetermined quality criterion used in accordance with the technology described herein~~present invention~~ to determine whether further error correction should be applied, has mainly been exemplified as a threshold value of the minimum loss function. Other embodiments may use other quality criteria than the minimum loss function. The quality criterion is preferably related to the residual of a least squares solution providing